Comparisons of Job Characteristics

Focus Occupation: Industrial Engineers (17-2112)

Associated Occupation: Inspectors, Testers, Sorters, Samplers, and Weighers (51-9061)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

72

Knowledge	Similarity of Focus Occupation to Associated Occupation: 79					
Focus Occupation: Industrial Engineers (17-2112) Associated Occupation: Inspectors, Testers, Sorters, Samplers, and Weighers (51-9061)						
Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	•	Focus Occupation's Rating	Evaluation of Focus Occupation		
Production and Processing	6.0	11.9	17.4	Current knowledge level is likely more than sufficient		

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation:

Focus Occupation: Industrial Engineers (17-2112)

Associated Occupation: Inspectors, Testers, Sorters, Samplers, and Weighers (51-9061)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Operation Monitoring	6.6	8.0	6.5	A higher skill level may be required	
Quality Control Analysis	5.9	7.9	5.0	Extensive development of skills in this area may be required	
Troubleshooting	4.5	5.5	4.1	Extensive development of skills in this area may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 8

Focus Occupation: Industrial Engineers (17-2112)

Associated Occupation: Inspectors, Testers, Sorters, Samplers, and Weighers (51-9061)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Oral Comprehension	12.5	12.2	14.6	>	Current ability level is likely sufficient
Oral Expression	12.4	11.9	14.5	>	Current ability level is likely sufficient
Near Vision	11.1	10.5	12.5	>	Current ability level is likely sufficient
Written Comprehension	11.0	10.1	14.6	>>	Current ability level is likely more than sufficient
Category Flexibility	9.0	9.6	10.7	>	Current ability level is likely sufficient
Deductive Reasoning	10.6	9.4	12.5	>>	Current ability level is likely more than sufficient
Problem Sensitivity	11.1	9.2	13.6	>>	Current ability level is likely more than sufficient
Inductive Reasoning	10.2	9.0	12.8	>>	Current ability level is likely more than sufficient
Flexibility of Closure	7.8	8.5	9.3	0	Current ability level may be sufficient
Auditory Attention	5.9	7.6	7.3	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 75

Focus Occupation: Industrial Engineers (17-2112)
Associated Occupation: Inspectors, Testers, Sorters, Samplers, and Weighers (51-9061)

Work Activities	Exclusivity of Activity
Communicate technical information	4
Follow manufacturing methods or techniques	73
Follow statistical process control procedures	73
Perform safety inspections in industrial, manufacturing or repair setting	32
Prepare safety reports	60
Prepare technical reports or related documentation	22
Read blueprints	10
Read production layouts	66
Read technical drawings	7
Record test results, test procedures, or inspection data	48
Understand engineering data or reports	48
Use hazardous materials information	35
Use long or short term production planning techniques	74
Use quality assurance techniques	61
Use technical information in manufacturing or industrial activities	67

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 70

Focus Occupation: Industrial Engineers (17-2112)
Associated Occupation: Inspectors, Testers, Sorters, Samplers, and Weighers (51-9061)

Tools and Technologies	Exclusivity
Business function specific software	1
Computer printers	2
Computers	1
Content authoring and editing software	1
Electrical measuring and testing equipment	7
Indicating and recording instruments	2
Industry specific software	1
Laboratory environmental conditioning equipment	24
Length and thickness and distance measuring instruments	2
Light and wave generating and measuring equipment	4
Metals and metallurgy and structural materials testing instruments	15
Pressure measuring and control instruments	10
Temperature and heat measuring instruments	6
Viewing and observing instruments and accessories	4

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O^*NET (Occupation Information Network) data.